

# Nitun Kumar Podder

Lecturer

Department of Computer Science and Engineering  
Pabna University of Science and Technology (PUST)  
Pabna 6600, Bangladesh



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LinkedIn

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Orcid

NK Podder

Faculty Profile

Personal Website

## Career Objectives

- Develop my career in teaching and research field where I will have the scope to utilize my potentiality, adaptability and I can learn and contribute in positive ways. As a young aspirant, I want to pursue my goal with dedication, sincerity, honesty and hard work.

## Areas of Interest

- Bioinformatics and Computational Biology; Computer Vision and Image Processing; Machine Learning and Deep Learning



## Education

- 2020 – 2022 **M.Sc. Engg. in Computer Science and Engineering**  
Khulna University of Engineering & Technology (KUET), Khulna, Bangladesh  
**CGPA: 3.83 out of 4.00**  
Thesis title: *A Study on Identification of Influential Genes Revealed Survival Impact of Cancer Using Bioinformatics and Machine Learning Models*
- 2017 (Held in 2019) **B.Sc. Engg. in Computer Science and Engineering**  
Pabna University of Science and Technology (PUST), Pabna, Bangladesh  
**CGPA: 3.77 out of 4.00 (Last 5 semester avg. 3.92)**  
**Position: First (with Honors) among 48**  
Thesis title: *Genetic Profiling and Comorbidities of Diabetes*
- Passing Year 2012 **Higher Secondary Certificate (HSC)**  
Govt. Rajendra College, Faridpur, Bangladesh  
Group: Science; Board: Dhaka  
**GPA: 5.00 out of 5.00**
- Passing Year 2010 **Secondary School Certificate (SSC)**  
Madhukhali Pilot High School, Madhukhali, Faridpur, Bangladesh  
Group: Science; Board: Dhaka  
**GPA: 5.00 out of 5.00**

## Research Publications

### Journal Articles

- 1 S. B. S. Omit, S. Akhter, N. K. Podder, *et al.*, "Identification of comorbidities, genomic associations, and molecular mechanisms for covid-19 using bioinformatics approaches," *BioMed Research International*, vol. 2023, 2023. DOI: <https://doi.org/10.1155/2023/6996307>.
- 2 N. K. Podder, A. K. Puza, H. K. Rana, *et al.*, "Interplay of machine learning and bioinformatics approaches to identify genetic biomarkers that affect survival of patients with cancer," *Information Science*, vol. 2023, 2023.

- 3 J. D. Barua, S. B. S. Omit, H. K. Rana, N. K. Podder, U. N. Chowdhury, and M. H. Rahman, "Bioinformatics and system biological approaches for the identification of genetic risk factors in the progression of cardiovascular disease," *Cardiovascular Therapeutics*, vol. 2022, 2022.  DOI: <https://doi.org/10.1155/2022/9034996>.
- 4 N. K. Podder, H. K. Rana, M. S. Azam, *et al.*, "A system biological approach to investigate the genetic profiling and comorbidities of type 2 diabetes," *Gene Reports*, vol. 21, p. 100 830, 2020, ISSN: 2452-0144.  DOI: <https://doi.org/10.1016/j.genrep.2020.100830>.












## Conference Proceedings

- 1 M. M. I. Molla, J. J. Jui, H. K. Rana, and N. K. Podder, "Machine learning algorithms for the prediction of prostate cancer," in *Proceedings of International Conference on Information and Communication Technology for Development*, M. Ahmad, M. S. Uddin, and Y. M. Jang, Eds., Singapore: Springer Nature Singapore, 2023, pp. 471–482, ISBN: 978-981-19-7528-8.
- 2 N. K. Podder and P. C. Shill, "Statistical and bioinformatics model to identify the influential genes and comorbidities of glioblastoma," in *Proceedings of International Conference on Machine Intelligence and Emerging Technologies (MIET 2022)*, Springer, 2023.
- 3 M. S. Rana, N. K. Podder, H. K. Rana, *et al.*, "Identification of genomic associations between parkinson's and neurodegenerative diseases using bioinformatics models," in *2023 International Conference on Electrical, Computer and Communication Engineering (ECCE)*, 2023, pp. 1–6.  DOI: [10.1109/ECCE57851.2023.10101597](https://doi.org/10.1109/ECCE57851.2023.10101597).
- 4 M. Imam Hasan, S. Nahar, B. Roy, H. Kabir Rana, N. Kumar Podder, and S. Babu Sen Omit, "Identification of influential genes for lung cancer using machine learning approaches," in *2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI)*, 2022, pp. 1–6.  DOI: [10.1109/STI56238.2022.10103239](https://doi.org/10.1109/STI56238.2022.10103239).
- 5 N. K. Podder, F. Akter, A. K. Puza, *et al.*, "A bioinformatics approach to identify the influences of diabetes on the progression of cancers," in *2022 International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE)*, 2022, pp. 1–6.  DOI: [10.1109/ICAEEE54957.2022.9836409](https://doi.org/10.1109/ICAEEE54957.2022.9836409).
- 6 N. K. Podder, A. K. Puza, H. K. Rana, B. C. Podder, M. A. Rahim, and P. C. Shill, "Identification of influential genes and comorbidities of colorectal cancer," in *2022 International Conference on Recent Progresses in Science, Engineering and Technology (ICRPSET)*, IEEE, 2022, pp. 1–4.
- 7 N. K. Podder, P. C. Shill, H. K. Rana, *et al.*, "Network-based approach to identify pathways and macromolecule interactions that mediate influences of covid-19 on the progression of respiratory system diseases," in *2022 International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE)*, 2022, pp. 1–6.  DOI: [10.1109/ICAEEE54957.2022.9836408](https://doi.org/10.1109/ICAEEE54957.2022.9836408).
- 8 B. Roy, S. Nahar, M. I. Hasan, H. Kabir Rana, N. K. Podder, and S. Babu Sen Omit, "Identification of influential genes for colorectal cancer using machine learning approaches," in *2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI)*, 2022, pp. 1–6.  DOI: [10.1109/STI56238.2022.10103273](https://doi.org/10.1109/STI56238.2022.10103273).
- 9 N. K. Podder, P. C. Shill, H. K. Rana, S. B. S. Omit, M. M. H. Al Shahriar, and M. S. Azam, "Genetic effects of covid 19 on the development of neurodegenerative diseases," in *2021 5th International Conference on Electrical Information and Communication Technology (EICT)*, 2021, pp. 1–6.  DOI: [10.1109/EICT54103.2021.9733698](https://doi.org/10.1109/EICT54103.2021.9733698).
- 10 R. Datta, N. K. Podder, H. K. Rana, M. K. B. Islam, and M. A. Moni, "Bioinformatics approach to analyze gene expression profile and comorbidities of gastric cancer," in *2020 23rd International Conference on Computer and Information Technology (ICCIT)*, 2020, pp. 1–6.  DOI: [10.1109/ICCIT51783.2020.9392587](https://doi.org/10.1109/ICCIT51783.2020.9392587).




## Employment History

- Oct,2022 – Present  **Lecturer,**  
Department of Computer Science and Engineering,  
Pabna University of Science and Technology (PUST)  
Pabna-6600, Bangladesh.
- May,2022 – Oct,2022  **Former Research Associate.**  
Bangladesh Institute of Governance and Management (BIGM)  
Sher-E-Bangla Nagar, Dhaka-1207, Bangladesh.
- Dec,2019 – May,2022  **Former Lecturer,**  
Department of Computer Science and Engineering,  
Z. H. Sikder University of Science and Technology (ZHSUST)  
Shariatpur, Bangladesh.
- Apr,2019 – Sep,2019  **Former Part-time Lecturer,**  
Department of Computer Science and Engineering,  
Pabna Engineering College, Affiliated by University of Rajshahi  
Pabna, Bangladesh.

## Technical and Programming Skills

- Languages  C, C++, JAVA, C#, Assembly, Prolog, R, Python.
- Databases  MySQL, Oracle
- Analysis Tools  RStudio, Matlab, Cytoscape, Mega, String, NetworkAnalyst
- IDE  VSCode, Code Blocks, Jupyter Notebook, Android Studio, Microsoft Visual Studio
- Framework  OpenGL, Laravel, Django
- Web Language  HTML, css, JavaScript, Bootstrap, Apache Web Server, PHP, AJAX
- Networking  CISCO Packet Tracer, IP addressing, Subnetting, Supernetting, VLSM, VLAN, DNS Server, FTP Server, Web server, Mail Server.
- Application Tools  MS Word, Excel, PowerPoint, Adobe Photoshop, Adobe Illustrator
- OS  MS DOS, All Windows, Linux
- Version Control  Git, GitHub
- Misc.  Academic research, teaching, training, consultation,  $\LaTeX$  typesetting.

## English Proficiency

-  Medium of Instruction was English in Undergraduate Program (B. Sc. Engg.) at Dept. of CSE, PUST and Graduate Program (M.Sc. Engg.) at Dept. of CSE, KUET.
-  Medium of Instruction in English in my profession at the Pabna University of Science and Technology. We are strongly instructed to conduct courses, supervision and discussion in English.
- 2020  IELTS: 7.0 (Listening: 7.0 | Reading: 7.0 | Speaking: 7.5 | Writing: 6.5)





## Miscellaneous Experience

### Awards and Achievements








- 2022  **IEEE Best Paper Award** in International Conference on Recent Progresses in Science, Engineering and Technology (ICRPSET) 2022.
- 2019  **Stood First (1st) Position** in B.Sc. Engg. Examination Results at Dept. of CSE, PUST.

## Miscellaneous Experience (continued)




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- 2016-2017     Deans Award at Undergraduate Level.
- 2014-2017     Undergraduate scholarship at PUST throughout the four years based on merit.
- 2007          Merit Scholarship (General) of Bangladesh Junior Level Scholarship Examination.
- 2004          Merit Scholarship (Talent-pool) of Bangladesh Primary Level Scholarship Examination.










## Project Work Experience

- 2022          Feasibility Study of Integrated Reform Management Project (IRMP) by Cabinet Division, People's Republic of Bangladesh.
-  State of Evidence Based Policy Making in Bangladesh Public Service: Three Case Studies (Adolescence Health Strategy) by MoPA, Bangladesh.
- 2020          NLP Project- Word Prediction, Spell Correction, and Sentiment Analysis (Python).
- 2017          Management Systems-Attendance, Dept. Library (HTML, CSS, Bootstrap, PHP, Javascript); Office Automation (Laravel Framework,HTML5,CSS3,Apache server).
- 2016          Graphical Presentation of a Meeting Room (OpenGL Technology); E-Commerce Site (HTML, CSS, Bootstrap, PHP, Javascript).
- 2015          Smart Door Locking System (Hardware Project); Restaurant Management System (Android Studio); Network Layer Design (Java Technology).
- 2014          Dice Game (C Structure); Car Racing Game (C++ & graphics); Scientific Calculator (C#).

## Problem Solving

- 2016-2017     ACM International Collegiate Programming Contest.
- 2014-2017     Intra University Programming Contest, Organized by Dept. of CSE, PUST.
-  Solved more than 500 Analytical and Algorithmic Problems including in URI, UVA, LightOJ, CodeForces etc.




## Other Experiences

- 2023-Cont.     Advisor, Padma Student well-fare Association, PUST.
-  Advisor, Prothom Alo Bondhu Shova, PUST Branch.
- 2022          Published Articles (OP-EDs) in English Daily Newspaper (Daily Sun).
- 2020-Cont.     Associate Member, Bangladesh Computer Society (AM-14544).
- 2020-2021     Former Convener, Robotics Club, Z. H. Sikder University of Science and Technology.
- 2020-2022     Former Organizing Chair, Binary Club, Z. H. Sikder University of Science and Technology.
- 2014-2019     Executive Member, CSE Programming Club, Pabna University of Science and Technology.
- 2015-2019     Former Class Representative, Dept. of CSE, PUST.
- 2017-2019     Former Admin, Boighor (Library), Dept. of CSE, PUST.

## Thesis & Project Supervisions

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### Thesis Title

-  Identification of Influential Genes and Comorbidities of Colorectal Cancer.
-  Network-based approach to identify pathways and macromolecule interactions that mediate influences of covid-19 on the progression of respiratory system disease.
-  A bioinformatics approach to identify the influences of diabetes on the progression of cancers.

## Thesis & Project Supervisions (continued)

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- Genetic effects of covid 19 on the development of neurodegenerative diseases.

### Projects

- Management Systems- Library, Blood-bank, Pharmacy, School, Photography, Job-portal, Home Rental Service (Web-based Applications)
- C++ project using igraphics (Different Types of Games, Calculator, and Management systems)

## Personal Details

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Name	Nitun Kumar Podder
Father's Name	Nishith Kumar Podder
Mother's Name	Kalpana Rani Podder
Birth Place and Date	Faridpur, 25 December, 1994
Nationality	Bangladeshi (By Birth)
Religion	Hindu
Blood Group	O+ (O Positive)
Marital Status	Unmarried
Mailing Address	Nitun Kumar Podder Lecturer, Dept. of Computer Science and Engineering, Pabna University of Science and Technology, Pabna 6600, Bangladesh Mobile: +8801720543366; Email: nitun@pust.ac.bd
Permanent Address	Village: West Garakhola; Post Office + Sub district + Police Station : Madhukhali; District : Faridpur; Division : Dhaka; Country : Bangladesh;

## References

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- Dr. Pintu Chandra Shill  
Professor,  
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- I hereby certify that the above information is true and correct to the best of knowledge.

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(Nitun Kumar Podder)